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08/506,032

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
08/506,032	07/24/95	FOREST	D

EXAMINER

LM51/0527

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ART UNIT	PAPER NUMBER
2774	35

DATE MAILED: 05/27/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 7/24/97, 10/14/97, 10/22/97, 11/3/97, 1/19/98.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), ~~or thirty days~~, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☒ Claim(s) 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.
☐ received in Application No. (Series Code/Serial Number) _____.
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of Reference Cited, PTO-892
☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
☐ Interview Summary, PTO-413
☐ Notice of Draftperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

★ U.S. GPO: 1996-421-632/40206

Serial Number: 08/506,032

Art Unit: 2774

1. Upon further consideration, the restriction requirement is withdrawn. Claims 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 are pending in the application, and claims 2-18, 59, 60, 81, 90-93, 95-100, 107, 109-111 have been canceled.

2. The numbering of claims is not accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 204 been renumbered 203.

3. The nonstatutory double patenting rejection is based on a judicially crtrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-142 of copending Application No. 08/506,445. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter are obvious over each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18-69 of copending Application No. 08/506,152. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter are obvious over each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US. PAT. NO. 5,177,328) in view of Baker (US. PAT. NO. 4,586,035), Lazzaro ("Computers for the Disabled"), Golding ("Audio Response

Terminal"), Atkinson (US. PAT. NO. 4,931,783), Choi (US. PAT. NO. 5,285,265), Anderson (US. PAT. NO. 4,291,198).

Ito discloses a display system for displaying a plurality of selectable regions on the display screen (see Fig. 2), one or more selectable region associated respectively with a sequence of one or more character. Fig. 2 of Ito does not show each of the selectable region adjacent a side of the polygon on the display, and the plurality of selectable regions in Fig. 2 of Ito do not together at least partially circumscribing a region of the display. However, Fig. 12 of Ito teaches each of the selectable region adjacent a side of the polygon of the display, and the plurality of selectable regions together at least partially circumscribing a region of the display. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify each of the selectable region in Fig. 2 of Ito to be adjacent a side of the polygon on the display, and the plurality of selectable regions together at least partially circumscribing a region of the display since the number of selectable regions and the location of the selectable regions are the desirable choice based on the desired commands to be allocated to the selection regions (note col. 7, lines 32-40 of Ito).

Ito does not explicitly disclose moving a cursor intersecting with a selectable region for selecting the selectable region. However, Baker teaches to use a cursor control for selecting a selectable region by moving the cursor within the selectable region. In addition, Baker also teaches the selectable region include an invisible subregion outside the display area. Thus, it would have been obvious to substitute one type of input manipulator for another to one having ordinary skill in the art at the time the invention was made to modify Ito to move the cursor within the selectable region for

selecting the selectable region since Baker teaches it is a conventional way to activate a selectable region (col. 4, lines 15-19).

Ito does not disclose the selection means is responsive to a dwell event. However, Lazzaro discloses to select a selectable region in response to a dwell events and a pointer responsive to the movement of a body member of a user (see page 62 of Lazzaro). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the selection means of Ito to select the selectable regions in response to a dwell event as taught by Lazzaro so as to provide an input device which can be controlled by handicapped individuals whose movements are limited.

Ito as modified does not teach the display system comprising a voice output for a user having impaired speech for speaking the words responsive to the selection means. However, Golding had explicitly suggested the use of a speech synthesizer as an addition to a visual output to reproduce words, phrases, sentences to the user (page 5634), and Page 60 of Lazzaro explicitly states a speech-synthesis system has been employed to help blind people to read and nonverbal people to speak. Thus, it would have been further obvious to one having ordinary skill in the art at the time the invention was made to modify the display system of Ito as modified to have a voice output system so as to allow the operator options of using a visual image output or audible messages output which help blind people to read and nonverbal people to speak.

Ito as modified does not disclose a menu option associated with a plurality of submenu. However, it is well known in the art that a menu option is associated with a plurality of submenus

(e.g., see Fig. 1 of Atkinson, EDIT is a menu, and UNDO, CUT, etc, are the submenus of the EDIT menu), and selectting a menu or submenu option in response to the intersection of the cursor and a selectable region. Thus, it would have been further obvious to one having ordinary skill in the art at the time the invention was made to modify the menu options of Ito as modified to have submenus as taught by Atkinson so as to provide additional selected functions to the user.

Ito as modified does not disclose an indicator for indicating the time difference between the cursor at a second location and the cursor at a first location. However, Choi discloses a device comprising an indicator (level meter inside the sub-screen as shown in Fig. 3) which shows the remaining time before an activation signal (selection) is optionally applied (col. 2, lines 60-64, col. 3, lines 40-42, 48-54). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display system of Ito as modified to have an indicator as taught by Choi so as to provide the user with an opportunity to cancel or change the selected region without any interruption.

Fig. 2 of Ito as modified does not disclose each menu option associated respectively with a user activatable switch outside the display area. However, Fig. 2 and 8 of Anderson teaches each menu option associated respectively with a user activatable switch (16) outside the display area. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display system of Ito as modified to have a user activatable switch outside the display area associated respectively with each menu option as taught by Anderson so as to enable

users to have convenient (soft key) access to computer services to exercise specific control over the direction of execution of the program.

Ito as modified teaches the display system as in independent claims 71, 74, 76.

Ito as modified by Baker, Golding and Lazzaro teaches the display system as in independent claims 73, 80, 163, 164.

Ito as modified by Lazzaro teaches the display system as in independent claims 85, 19, 52, 53, 54, 63, 65, 70, 72, 79.

Ito as modified by Lazzaro and Atkinson teaches the display system as in independent claim 33.

Ito as modified by Golding, Lazzaro, and Choi teaches the display system as in independent claim 134.

Ito as modified by Golding, Lazzaro and Anderson teaches the display system as in independent claims 159, 160, 162.

Ito as modified by Golding, Lazzaro, Atkinson and Anderson teaches the display system as in independent claim 161.

Ito as modified by Baker, Golding teaches the display system as in independent claim 198.

Ito as modified by Anderson teaches the display system as in independent claim 67.

Fig. 5 of Ito discloses the display system comprising a display screen (3), means for at least partially delimiting a plurality of selectable regions (25A-25C), and each of the selectable regions

outside the display screen and each associated respectively with a displayed menu option, which within the scope of independent claims 1, 106, 114, 147, 155, 165, 166, 94, 158, 170, 39, 61, 89, 78.

As to dependent claims 20-32, 34-38, 40-51, 55-58, 62, 64, 66, 68, 69, 75, 77, 82-84, 86-88, 101-105, 108, 112, 113, 115-133, 135-146, 148-154, 156, 157, 167-169, 171-197, 199-203, they are also rejected for the same reasons as set forth in the rejection above.

7. Applicant's arguments with respect to claims 1, 19-58, 61-80, 82-89, 94, 101-106, 108, 112-203 have been considered but are moot in view of the new ground(s) of rejection.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

REGINA LIANG
PRIMARY EXAMINER
ART UNIT 2774

RL